

**REMARKS**

Upon entry of the present amendment, claims 15-18 will have been submitted for the Examiner's consideration, and claim 1 will have been amended for enhanced clarity.

Initially, Applicants would like to thank the Examiner for withdrawing the 35 U.S.C. § 112, first paragraph rejection in response to Applicant's amendment entered on November 4, 2003.

In the outstanding Official Action, the Examiner rejected claims 1, 6-8, 10, and 11-14 under 35 U.S.C. 103(a) as being unpatentable over MURAMOTO et al. (U.S. Patent No. 6,507,359) in view of SENSUI (U.S. Patent No. 6,041,186). The Examiner also rejected claims 2 and 9 under 35 U.S.C. § 103(a) as being unpatentable over MURAMOTO et al. in view of SAITO (U.S. Patent No. 5,652,926). The Examiner also rejected claims 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over MURAMOTO et al. in view of SAITO further in view of SORIMACHI (U.S. Patent No. 4,818,858). Finally, the Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over MURAMOTO et al. in view of SAITO further in view of SENSUI.

With respect to independent claims 1 and 8, the Examiner asserted that MURAMOTO et al. disclose a stereo camera comprising a pair of photographing optical systems that produce a corresponding pair of photographing areas, and are located in a common plane, and an object distance measuring device that measures a distance to an object. Further, the

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Examiner asserted that MURAMOTO et al. discloses group lenses and an optical mirror, which (according to the Examiner) could be a prism , thus being adjusted and controlled in accordance with convergence angle. The Examiner also recognized that MURAMOTO et al. do not contain any disclosure regarding a prism or an apex angle. However, the Examiner cited a single sentence in SENSUI that indicates that a variable apex angle prism may be used to achieve a similar effect. The Examiner then concluded that it would have been obvious to modify MURAMOTO et al.'s video camera system as taught by SENSUI for providing a finder system separately from the photographing optical system. Applicants respectfully traverse and submit that the Examiner is incorrect.

The image display system of MURAMOTO et al. includes a pair of image-taking systems, and the image-taking systems are rotatable and shiftable to adjust the base length (the image-taking systems 232 and 233 in Figure 4, and col. 8 lines 39-43.)

As correctly noted by the Examiner, the image display system of MURAMOTO et al. does not disclose variable angle prisms, as recited in the present claims. SENSUI was relied upon for allegedly teaching the conventionality of variable angle prisms. Applicants do not dispute that variable angle prisms exist. However, there is no motivation whatsoever for incorporating the features of SENSUI into a stereo camera, for example, like that of MURAMOTO et al. Accordingly, the Examiner is respectfully requested to provide motivation (based upon the prior art) for combining the teachings.

However, even it were appropriate to combine MURAMOTO et al. and SENSUI, the teaching of the latter are inadequate for several reasons to render the presently recited claims obvious.

The structure of SENSUI is clearly distinct and remote from that of a stereo camera. As shown in Fig 1A of SENSUI, the first and second optical axes Ax1 and Ax2 are spaced by a predetermined base length so that the first and second optical systems 1001R and 1002R view an object at different viewing angles (col. 5, lines 44-47).

Further, SENSUI relates to a finder system that is explicitly recited to be separate from a photographing optical system (col. 4, lines 39-44). Conversely, the present application relates to a stereo camera, including the photographing optical systems thereof. Furthermore, at very best, SENSUI can only teach a single variable apex angle prism, because it is utilized for replacement of the rotatable mirror 40 (see Fig. 1A) or the objective optical system 20RS (see Fig. 1B).

SENSUI is still vague at best as to the incorporation of a variable apex angle prism into the finder system. SENSUI offers only one sentence with no explanation as to its inclusion in the finder system (col. 7, line 21-22 and col. 13, line 22-23). One is left to speculate that the variable apex angle prism would be provided solely in the second optical system 1002R in order to adjust the degree of superimposition of an image, formed by the

second optical system 1002R, to be superimposed on an image formed by the first optical system (col. 6, lines 12-19).

Moreover, SENSUI teaches away from combining the variable apex angle prism into a stereo camera, since the optical systems 1001R and 1002R are clearly dissimilar, as evidenced by the figures and the discussion at col. 5, line 37- column 6, line 19. Because of the peculiar configuration of SENSUI, one variable apex angle prism may be used in one optical system for adjusting the degree of superimposition of an image formed by that optical system on the image formed by the other optical system.

In distinct contrast, in the present application, the right and left photographing optical systems (RL and LL, respectively), and corresponding photographing units 21 and 22 are identical in structure (see e.g., page 9 and Fig. 9). As a result of the identical structures (see claims 17 and 18), an angle of convergence obtained at photographing unit 21 is would be identical to an angle of convergence obtained at photographing unit 22, as is clearly shown in Fig. 10. Such a unique situation would not be possible with the configuration of SENSUI.

Thus, it would be inappropriate to combine the teachings of MURAMOTO et al. and SENSUI. Clearly, there is no suggestion or disclosure in MURAMOTO et al. or SENSUI, either separately or in any proper combination, that render obvious the features of the present claimed invention. However, even if it were appropriate to combine MURAMOTO et al. and SENSUI, the Applicants have shown that the presently claimed subject matter is

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distinguishable over the variable apex angle prism and the optical systems 1001R and 1002 of SENSUI.

Accordingly, SENSUI fails to overcome the deficiencies admitted by the Examiner to exist in MURAMOTO et al. Beyond a doubt, none of the prior art relied upon by the Examiner, taken alone or in combination, render obvious the features of the presently claimed invention.

With respect to independent claim 9, the Examiner asserted that MURAMOTO et al. disclose a stereo camera comprising a pair of photographing optical systems that produce a corresponding pair of photographing areas, and are located in a common plane, each including an image pickup device and an object distance measuring device that measures a distance to an object and convergence angle adjustment, and a controller to control each photographing optical system. The Examiner also recognized that MURAMOTO et al. do not contain any disclosure regarding a button/switch for performing active and passive distance measurement. In making an obviousness rejection, the Examiner combined MURAMOTO et al. with the switching system as taught by SAITO to perform distance measurement.

However, there exists significant differences between SAITO and the claimed subject matter. In SAITO, both active and passive distance measurements are obtained after release switch 32 is half-depressed (the SW 34 in the first step is depressed). More specifically,

referring to Fig. 4 and col. 8, lines 33-49, once the release switch is half-depressed, power is supplied to the active and passive distance measuring units A and P (step s110). Then, active distance measuring is performed by active distance measuring unit A (step s120). After the ambient temperature is measured at step s130, the passive distance measuring is performed by the passive distance measuring unit P (step s140). This is in stark contrast with the claimed subject matter of the present invention.

Specifically, in the presently recited claims, each pair of optical systems perform passive distance measurement of an object distance until a release button is depressed at least by half step, and perform active distance measurement after the release button is depressed at least by half step. Performing one measurement before the switch is actuated and one measurement after the switch is actuated, as in the present invention, is clearly distinct from the teaching of SAITO. SAITO must wait until the release switch 32 is depressed before performing any of the measurements, in order to turn ON the active and passive power supplies, a distinct disadvantage.

Applicants also maintain that it would not have been obvious, at the time the application was filed, to modify the camera system of MURAMOTO et al. with the switching system of SAITO. In this regard, the Examiner is respectfully requested to provide support (i.e., a motivation) for his assertion that it would have been obvious to combine the switching system of SAITO into the stereo camera of MURAMOTO et al.

Thus, SAITO is deficient whether considered alone or in combination, for at least the reasons furnished above. In fact, none of the prior art relied upon by the Examiner, taken alone or in combination, render obvious the features of the presently claimed invention.

With regard to claims 2-7 and 10-14, Applicants assert that they are allowable at least because they depend from either independent claim 1 or 9, which the Applicants submit have been shown to be allowable.

Applicants have also added new dependent claims 15 and 16, both of which depend from independent claim 9, which the Applicants submit have shown to be allowable. Additionally, Applicants have also added new dependent claims 17 and 18, which depend from independent claims 1 and 8, respectively, which the Applicants have shown to be allowable. Dependent claims 15-18 add no prohibited new matter and recite elements that are not taught by the prior art.

In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of previously asserted rejections set forth in the Official Action of January 30, 2004, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

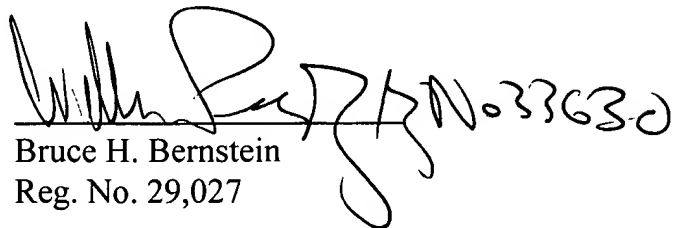
SUMMARY AND CONCLUSION

Applicants believe that the present application is in condition for allowance, and respectfully request an indication to that effect. Applicants have argued the patentability of the claims. Accordingly, reconsideration of the outstanding Official Action and allowance of the present application and all the recited claims therein are respectfully requested and now believed to be appropriate.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
T. ABE et al.

  
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